

What is claimed is:

1. A microwave tunable device, comprising:

a substrate; and

5 a ferroelectric/dielectric $(Ba_{1-x}, Sr_x)TiO_3$ (BST) thin film of a (111) direction which is formed on the substrate.

10 2. The microwave tunable device as recited in claim 1, wherein the ferroelectric/dielectric BST thin film is grown by performing a laser ablation.

3. The microwave tunable device as recited in claim 1, wherein the substrate is an MgO substrate.